Exemption No. 5236A

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
RENTON, WASHINGTON 98055-4056

In the matter of the petition of **EMBRAER EMPRESA BRASILEIRA DE AERONAUTICA S.A.** **for an exemption from § 121.312(a)(2) of the Federal Aviation Regulations**	**Regulatory Docket No. 26337**

AMENDMENT TO PARTIAL GRANT OF EXEMPTION

By letters EC-240/90 dated August 9, 1990, and EC-241/90 dated August 15, 1990, Mr. Luiz Alberto Gomes de Figueiredo, Assistant of Certification, Embraer Empresa Brasileira de Aeronautica S.A., Av. Brigadeiro Fario Lima, 2.170, 12.225 Sao Jose dos Campos - SP, Sao Paulo, Brazil, petitioned for exemption from § 121.312(a)(2) of the Federal Aviation Regulations (FAR) on behalf of current and future U.S. operators of the EMB-120 to permit operation of 35 airplanes which do not fully comply with the heat release and smoke density requirements for interior materials as specified in the regulation. In response to this petition, Exemption No. 5236 was granted on September 14, 1990. That exemption permits the operation of 35 airplanes, whose dates of manufacture are after August 20, 1990, with certain specified interior components that do not comply with the heat release and smoke emissions requirements of § 121.312(a)(2).

By message EC-356F/90 dated October 16, 1990, Embraer petitioned the FAA to amend Exemption 5236 to add two additional airplanes originally scheduled for delivery to a Canadian operator and now scheduled for delivery to a U.S. operator.

The EMB-120 is a twin engine turbopropeller-powered airplane approved for a maximum seating capacity of 30 passengers. The type certification basis of the airplane does not include Amendment 25-66 to Part 25 of the FAR.

Section of the FAR affected:

Section 121.312, as amended by Amendment 121-198, requires, in part, that certain large surface-area cabin interior components of certain

airplanes used in U.S. air carrier service must comply with the flammability and smoke emission standards of § 25.853 of Part 25 of the FAR. Airplanes manufactured on or after August 20, 1990, must comply with definitive standards of a maximum peak heat release rate of 65 kilowatts per square meter, a maximum total heat release of 65 kilowatt-minutes per square meter, and specific optical smoke density, D_2, of 200 (65/65/200). Those manufactured on or after August 20, 1988, but prior to August 20, 1990, are not required to meet the 65/65/200 standards of

§ 25.853; however, they must comply with interim standards of a maximum peak heat release rate of 100 kilowatts per square meter and a maximum total heat release of 100 kilowatt-minutes per square meter (100/100) in order to be used in U.S. air carrier service. The date of manufacture, as used in § 121.312, is the date on which inspection records show that an airplane is in a condition for safe flight. This is not necessarily the date on which an airplane is in conformity to the approved type design or the date on which a certificate of airworthiness is issued since some items not relevant to safe flight, such as passenger seats, may not be installed at that time. It could be earlier, but would certainly be no later than the date on which the first flight of the airplane occurs.

Related sections of the FAR:

Section 135.169 of Part 135 of the FAR, as amended by Amendment 135-31, requires, in part, that large airplanes, except for commuter category airplanes, must meet the requirements of § 121.312. Any exemption from the provisions of § 121.312 would provide the same relief for Part 135 operators.

Section 25.853 of Part 25 of the FAR, as amended by Amendment 25-66, requires, in part, that airplanes for which an application for type certificate is made after September 26, 1988, must comply with the 65/65/200 standards described above using the test apparatus and procedures specified in Part IV and V of Appendix F.

Parts IV and V of Appendix F of Part 25 specify the test apparatus and procedures to be used in showing compliance with the rate of heat release and smoke emission requirements of § 25.853, respectively. Heat release testing must be conducted using the Ohio State University (OSU) radiant rate of heat release apparatus; smoke testing must be conducted using the National Bureau of Standards (NBS) smoke chamber.

The petitioner's supportive information is as follows:

Embraer notes the addition of two aircraft, serial numbers 120-201 and 120-204, equipped with epoxy bulkheads which do not fully comply with the heat release and smoke density requirements for interior materials. These airplanes were not included in the original petition as they were scheduled for delivery to a Canadian operator at that time. For commercial reasons, these airplanes are now scheduled for delivery to a U.S. operator, Continental Airlines, on November 22, 1990, and January 28, 1991, respectively.
All other information provided by the petitioner in support of Exemption 5236 remains applicable to this amendment.

The FAA finds, for good cause, that action on this petition should not be delayed by publication and comment procedures for the following reasons: (1) a grant of exemption would not set a precedent in that this matter involves unique circumstances of this manufacturer's efforts to achieve compliance prior to the deadline established by the regulation, (2) delay in acting on the petition would be detrimental to the petitioner in that it would necessarily delay delivery of the aircraft, and (3) the reasons for this petition are identical to those for which Exemption 5236 was issued.

The FAA's analysis/summary is as follows:

The FAA has reviewed the petitioner's request for amendment of Exemption 5236 and finds that the conditions which justified that partial grant of exemption are applicable to this amendment as well.

While the subject airplanes will be permitted to enter service on schedule with the cargo bulkhead not substantiated for compliance, the FAA will require that this item be replaced with a part that is in compliance. As provided in Exemption 5236, the FAA has established a May 31, 1992, date for compliance with § 121.312(a)(2) in total. The two additional airplanes which are granted relief under the terms of this exemption will be required to show compliance on that date to remain in service.

In consideration of the foregoing, I find that an amendment to Exemption 5236 is in the public interest and will allow operation of the additional two EMB-120 airplanes for a limited period without an adverse impact on safety. Therefore, pursuant to the authority contained in §§ 313(a) and 601(c) of the Federal Aviation Act of 1958, delegated to me by the Administrator (14 CFR 11.53), the petition of Embraer Empresa Brasileira de Aeronautica S.A. to amend Exemption 5236 is granted with the following provisions:

1. This amendment is limited to 2 airplanes, serial numbers 120-201 and 120-204.

2. The authority to operate the above airplanes with interior materials that do not comply with § 121.312(a)(2) expires on May 31, 1992.

3. The materials which are exempted are limited to those contained in the cargo bulkhead separating the passenger cabin from the cargo compartment.

All other provisions of Exemption 5236, together with its conditions and limitations, remain the same and are applicable to this exemption. This amendment is part of, and shall be attached to, Exemption 5236.

Issued in Renton, Washington, on

F:\HOME\PLS\EXEMPT\5236A
10/24/90:ps
11/13/90:revised:ps:editorial